

***OPHIOMYIA GNAPHALII* HERING (DIPTERA: AGROMYZIDAE)
IN *ANTENNARIA DIOICA* IN SCOTLAND**

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While collecting near the entrance to Gleann Mór (NO0076), Fealar, Perthshire (VC 89) on 25.ix.1997, a rosette of the plant *Antennaria dioica* was found, in which several of the leaves contained basal mines. Later careful dismantling of the rosette revealed that some 9 leaves were mined, apparently by a single larva moving from leaf to leaf. Each leaf had between 2 and 4 broad diverging feeding tracks extending from the petiolar up into the lamina of the leaf. These tracks rarely went more than two-thirds of the way up towards the leaf apex. The frass was concentrated in the petiolar part of the mine (Fig. 1). Positioned vertically at the centre of the rosette was a single vacated agromyzid puparium.

Two species of leaf-mining agromyzid are known from *Antennaria dioica* in Europe, namely:

Ophiomyia gnaphalii Hering, 1949

Phytomyza kyffhusana Hering, 1928

= *gnaphalii* Hering, 1963—for synonymy see Spencer (1990).

Both species also mine *Gnaphalium* sp.. The differences in the mines of the two species in *Gnaphalium* sp. are discussed by Hering (1949). However, Spencer (1972) describes the mine of *O. gnaphalii* in *Gnaphalium* as an "external stem mine" without any reference to the mine extending into several leaves. The mine of *O. gnaphalii* in *Antennaria dioica* was first described by Buhr (1960) and later by Spencer (1990). The mine of *P. kyffhusana* (under the name *P. gnaphalii*) in *A. dioica* is discussed by Hering (1963). On the basis of these descriptions and consultation of the appropriate mines in the Hering Herbarium (The Natural History Museum, London), the Fealar mines belonged to *Ophiomyia gnaphalii*. Furthermore Dr K. A. Spencer confirmed that the puparium was that of an *Ophiomyia* species. The eight lobed posterior spiracles of the puparium of *O. gnaphalii* (Fig. 2) have not previously been described or illustrated, but differ conspicuously from those of *P. kyffhusana* which have 16–18 lobes each (de Meijere, 1937; Hering, 1963). The mines and puparium are now in the collections of The National Museums of Scotland, Edinburgh.

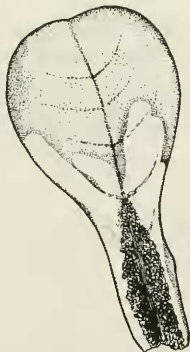


Fig. 1. Part of the mine of *Ophiomyia gnaphalii* in a leaf of *Antennaria dioica* from Fealar.

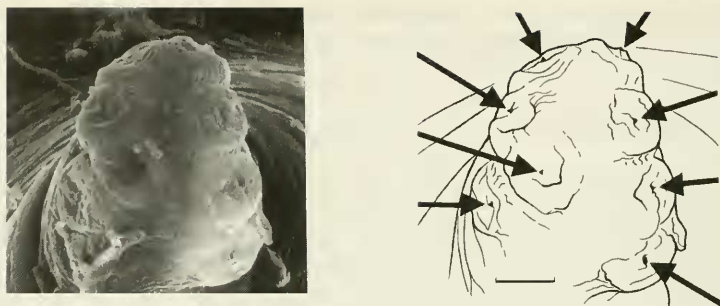


Fig. 2. (a) Scanning electron micrograph of a dorsal view of the right posterior spiracles of the puparium of *Ophiomyia gnaphalii*. (b) Diagram of the same posterior spiracles, to the same scale, with the eight individual spiracular openings indicated by arrows. The scale bar represents 10 μ m.

The present record of *O. gnaphalii* is the first record of the occurrence of this species in *Antennaria dioica* in Britain and only the second British record. It was first recorded in Britain from a single female fly taken on 18.vi.1902 at Ross, Herefordshire by Colonel Yerbury (Spencer, 1972). Abroad, the species seems to be known only from Germany.

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